

Tiered Permitting

Laws and Regulations

Hazardous Waste laws and regulations are contained in California Health and Safety Code (HSC), Division 20, Chapter 6.5, and California Code of Regulations (22 CCR), Title 22, Division 4.5, Chapter 11.

Background

The State of California has a five-tiered program for authorizing hazardous waste treatment or storage, which matches the regulatory requirements to the degree of risk posed by the facility's activities. The tiers include:

- Full Permit,
- Standardized Permit,
- Permit by Rule (PBR),
- Conditionally Authorized (CA), and
- Conditionally Exempt (CE).

DTSC regulates Full and Standardized Permitted facilities.

The three lower tiers (PBR, CA, and CE) are referred to as Tiered Permitting and allow hazardous waste generating businesses to treat eligible waste streams onsite. As a CUPA, the Department authorizes and regulates Tiered Permitting facilities.

General Limits

Eligibility for PBR is limited to onsite treatment and there are no volume limits and hazardous wastes with more than one hazard can be treated.

Eligibility for the CA tier is generally limited to onsite treatment of less than 5000 gallons or 45,000 lbs per month of hazardous wastes with only one characteristic or hazard.

Eligibility for the CE tier is generally limited to onsite treatment of less than 55 gallons per month of hazardous waste.

The Definition of Hazardous Waste Treatment

Hazardous Waste Treatment is defined in the law as follows:

- Any method, technique, or process which is not excluded from the definition of treatment and which is designed to change the physical, chemical, or biological character or composition of any hazardous waste or material contained therein, or which removes or reduces its harmful properties or characteristics for any purpose (HSC 25123.5)
- Method, technique, or process that changes the physical, chemical, or biological character or composition of any hazardous waste and, by that change, the waste becomes non-hazardous, significantly less hazardous, or more suitable for land disposal because of removal or reduction of undesirable properties such as toxicity, mobility, persistence, reactivity, bioaccumulation, flammability, or corrosivity (HSC 25179.2(e)).

Treatments Eligible for Tiered Permitting

Hazardous waste generators may treat their own wastes onsite, provided the treatments are exempt from RCRA permitting and eligible under State law and regulation. Further, generators must obtain authorization from the Department to conduct the treatment onsite under the appropriate tier.

Eligible onsite treatments under tiered permitting include:

- adsorption
- biological degradation
- centrifugation
- chemical stabilization
- chromium reduction
- compaction
- crushing
- distillation
- drying
- electro winning
- filtration
- gravity settling
- grinding
- ion exchange
- pH adjustment
- precipitation
- reverse osmosis
- screening separation (phase and magnetic)
- shredding.

Determining Tiered Permitting Eligibility

To determine eligibility for tiered permitting and to determine what tier that a business is eligible to treat hazardous waste, the following questions need answering:

- Is influent hazardous waste treated? How? What amount? Where?
- Is the waste treated generated onsite or offsite?
- Is the hazardous waste being treated in tanks and containers? How many? Where?
- Are wastes being co-mingled prior to treatment (RCRA/non-RCRA, corrosive/toxic/and reactive)?
- Is there any onsite recycling of waste?
- Are any wastes ineligible for tiered permitting such as waste waters containing cyanide being treated?
- Are the hazardous wastes or the hazardous waste treatments exempt from tiered permitting?

Note: DTSC's <http://www.dtsc.ca.gov/HazardousWaste/index.html#Hazardous%20Waste%20Generators> and the Unified Program Tiered Permitting Forms are useful in determining if a waste stream or treatment is eligible for tiered permitting. Consent agreements for cyanide destruction must be obtained by notifying DTSC.

Hazardous Waste Sampling For Tiered Permitting

Hazardous wastes are sampled from the point of generation. Sampling is done prior to co-mingling (mixing) and prior to any treatment. The sampling is from the influent and not the effluent waste water that enters the sewer.

Unlike effluent industrial waste water sampling which is typical done quarterly, semi-annually, or annually per LA County Sanitation District or LA City Bureau of Sanitation industrial waste permits, sampling for tiered

permitting is only done initially and when the influent waste stream being treated changes. If production processes and chemicals used remain unchanged, hazardous wastes generated will remain constant.

Sampling of waste streams must be representative per the EPA methods known as SW 846.

Analysis of samples must be done by a State Certified Laboratory (see www.dhs.ca.gov/ps/ls/elap/).

PBR facilities are required to have written waste analysis plans.

Management Requirements for All Tiers

The following is required of CE, CA, and PBR facilities:

- **Waste Determination.** The facility must characterize their waste stream(s) and treatment(s) to determine whether the treatment is eligible for tiered permitting. This determination should include a waste analysis and a written waste analysis plan for PBR facilities. The generator shall maintain documentation for this determination.
- **Notification and Authorization.** The facility must complete and submit a notification to our Department at least 60 days before starting any onsite hazardous waste treatment activities. The submittal must include an *Onsite Hazardous Waste Treatment Notification – Facility Page*, *Onsite Hazardous Waste Treatment Notification – Unit Page*, and an *Onsite Hazardous Waste Treatment – Waste and Treatment Process Combinations Page*.
- **Written Operating Instructions.** Written instructions must provide a record of the dates, volumes, residual management, and types of wastes treated in specific units. The written operating instructions must also address how to operate the treatment units(s) and carry out waste treatment; how to recognize potential and actual process upsets and respond to them; when to implement the contingency plan; and, how to determine if the treatment has been effective.
- **Written Inspection Schedule and Log.** The inspection schedule must document observations from the daily inspections of tanks and the weekly inspections of containers. A log of all inspections associated with the treatment systems must be kept onsite.
- **Generator Standards.** All tiered permitting facilities must meet generator standards for management of hazardous waste. These requirements include, but are not limited to, the following:
 - Contingency Plan
 - Written Training Plan and Records
 - Adequate Compliance Records. The facility must be able to show it is in compliance with all applicable pretreatment standards and applicable industrial waste discharge requirements issued by either the LA County Sanitation District or LA City Bureau of Sanitation.
 - Hazardous Waste Source Reduction Documents. Generators who generate or treat more than 1000 kilograms (or 265 gallons) per month of hazardous waste must prepare and maintain source reduction documents in compliance with SB 14 requirements.
 - Tank Management. Hazardous waste tanks including treatment tanks must be in good condition, labeled, and inspected daily. Also, tanks must either have secondary containment or be subject to integrity assessments by Professional Engineers.
 - Container Management
- **Closure.** Upon closure, the generator must remove or decontaminate any residue, equipment or soil. Additionally, tiered permitting facilities must submit written notification to the Department upon completion of all closure activities except PBR facilities shall notify 15 days prior to completion of closure.

Additional Requirements for CA and PBR Treatment Units

In addition to the above, both CA and PBR facilities have the following additional requirements:

- Financial Assurance. Financial assurance must be provided for future estimated closure costs. The closure cost estimate must be annually adjusted for inflation. A *Certification of Financial Assurance* must be submitted upon initial notification.
- Phase I Environmental Assessment. The assessment checklist must be submitted to the DTSC within one year from initial notification. The form and instructions are available from the DTSC.
- Written Closure Cost Estimate. The Generator must prepare a written cost estimate for the closure of each unit.
- Operating Instructions. In addition, the Concentrations of hazardous constituents in waste treated are required to be listed in the operating instructions.
- Containment Systems. The generator must have secondary containment for treatment in containers and for transfer and storage areas. In addition, containment systems must be adequately maintained by repairing cracks and gaps and removing spills and leaks.
- Security. The unknowing entry and possibility of the unauthorized entry of persons or livestock onto the active portion of the facility must be minimized. To ensure security, the following must be provided:
 - “DANGER HAZARDOUS WASTE AREA” Signs
 - “NO SMOKING” Signs for reactive/ignitable waste
 - 24-hour Surveillance system which continuously monitors and controls entry onto the active portion of the facility (e.g., television monitoring or surveillance by guards or facility personnel);
 - If the facility does not have a 24-hour Surveillance system, the facility must have an artificial or natural barrier (e.g., a fence in good repair, or a fence combined with a cliff) which completely surrounds the active portion of the facility, and a means to control entry at all times (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).

More Requirements for PBR Treatment Units

PBR facilities must meet the following additional standards:

- Annual Notification. PBR facilities must annually notify of treatment activities. This annual notification includes an annual waste minimization certification.
- Documentation of Environmental Investigations. This information is submitted with initial notifications and maintained onsite. Environmental investigations include cleanups (voluntary and non-voluntary orders) and formal enforcement actions by environmental regulatory agencies including administrative enforcement orders, civil actions, and criminal prosecutions.
- A written waste analysis plan. The plan must contain:
 - Parameters to be analyzed and rationale for selection of those parameters
 - Test methods to be used in the analyses
 - Sampling methods to be used to obtain a representative sample
 - Frequency of analysis
- Operating records. The operating records describe the 1) quantities, methods and dates of all hazardous waste treated, 2) results of waste analyses, and 3) details of all the incidents that require implementing the contingency plan (i.e., summary reports).
- Treatment Unit Marking. The treatment unit is required to be labeled with the owner/operator name, EPA ID number, and unit serial number.
- Written Closure Plan. This plan must describe how and when each treatment unit will be closed, including the steps needed to decontaminate each unit, and a schedule for the closure process.

Exemptions and Exclusions

Exempt Treatments

There are several treatment activities which, although they would be otherwise regulated, are exempt under the law provided certain conditions are met. No notification is required if these are the only treatment activities performed at the facility. These activities include:

- Biotechnology Elementary Neutralization Activities (HSC 25201.15)
- Neutralization of Acid/ Alkaline Wastes from Regeneration of Ion Exchange Media for De-ionized Water Systems (HSC 25201.13(a))
- Neutralization of Acid/ Alkaline Wastes from the Food Processing Industry (HSC 25201.13(c))
- Silver Recovery from Photo developing (HSC 25143.13)
- Sieving or Filtering Under Limited Conditions (HSC 25123.5(b)(2)(A))
- Phase Separation Under Limited Conditions (HSC 25123.5(b)(2)(B))
- Combination of Waste streams Under Limited Conditions (HSC 25123.5(b)(2)(C))
- Passive Evaporation of Water (HSC 25123.5(b)(2)(D))
- Laboratory Waste Treatment (HSC 25200.3.1)
- Aerosol Cans (HSC 25201.14 - rescinded)

Recycling Exclusions and Exemptions

Generators that recycle their hazardous waste onsite may qualify recycling exclusion from tiered permitting. The generator may qualify for this exclusion under HSC Section 25143.2 provided management standards for excluded recyclable materials (HSC 25143.9) and reporting requirements for excluded recyclable materials (HSC 25143.10) are met.

Additionally, the exclusion must be for legitimate significant recycling activities and not for “sham” recycling that is not beneficial and may be considered as a means to avoid regulation.

Any business that claims an onsite recycling exclusion or exemption must file a Recyclable Materials Biennial Report with our Department every two years.